

Figure 1. Synthesis of MDMA-KLH Immunogen (10)

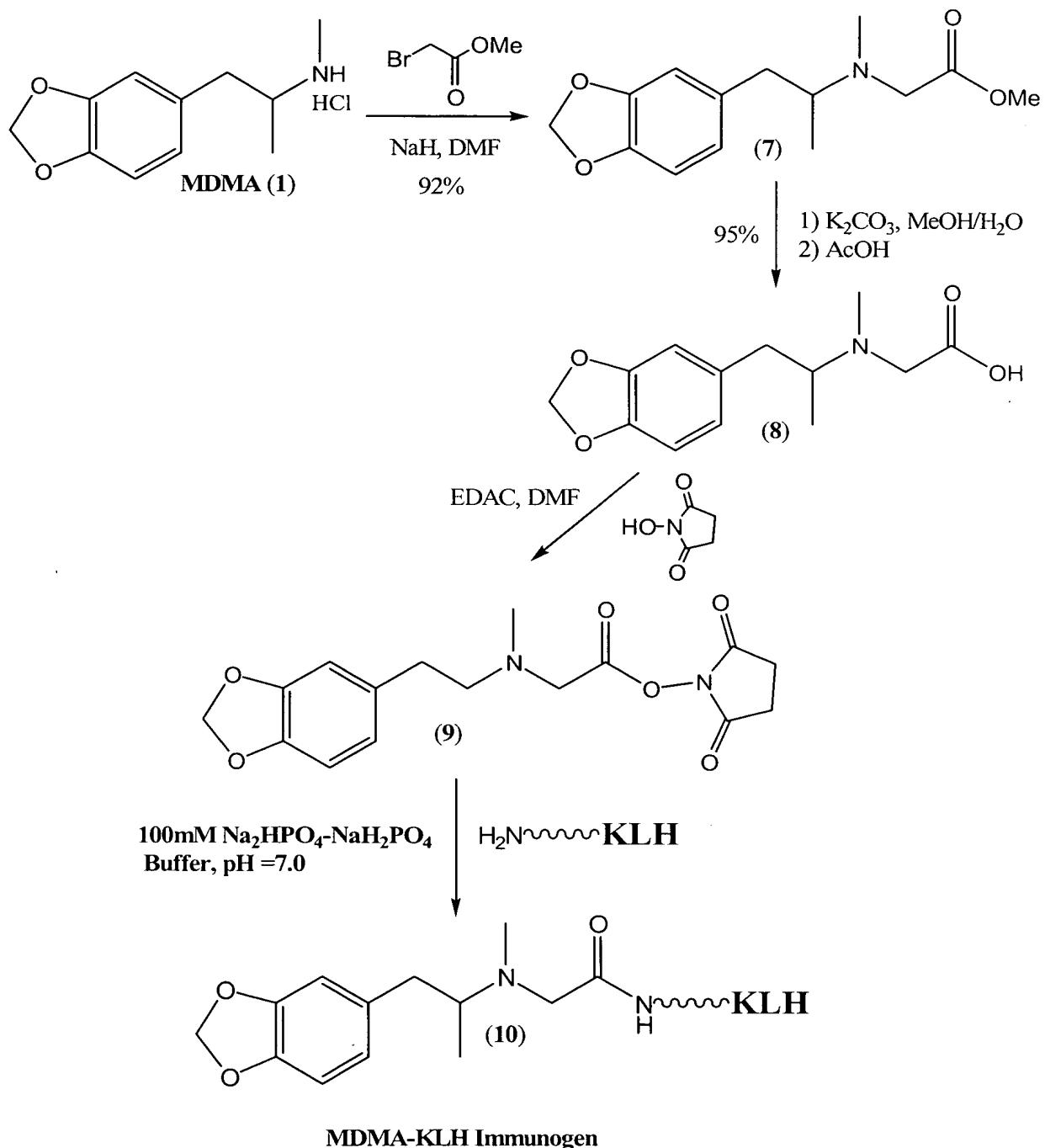


Figure 2. Synthesis of MDA-KLH Immunogen (14)

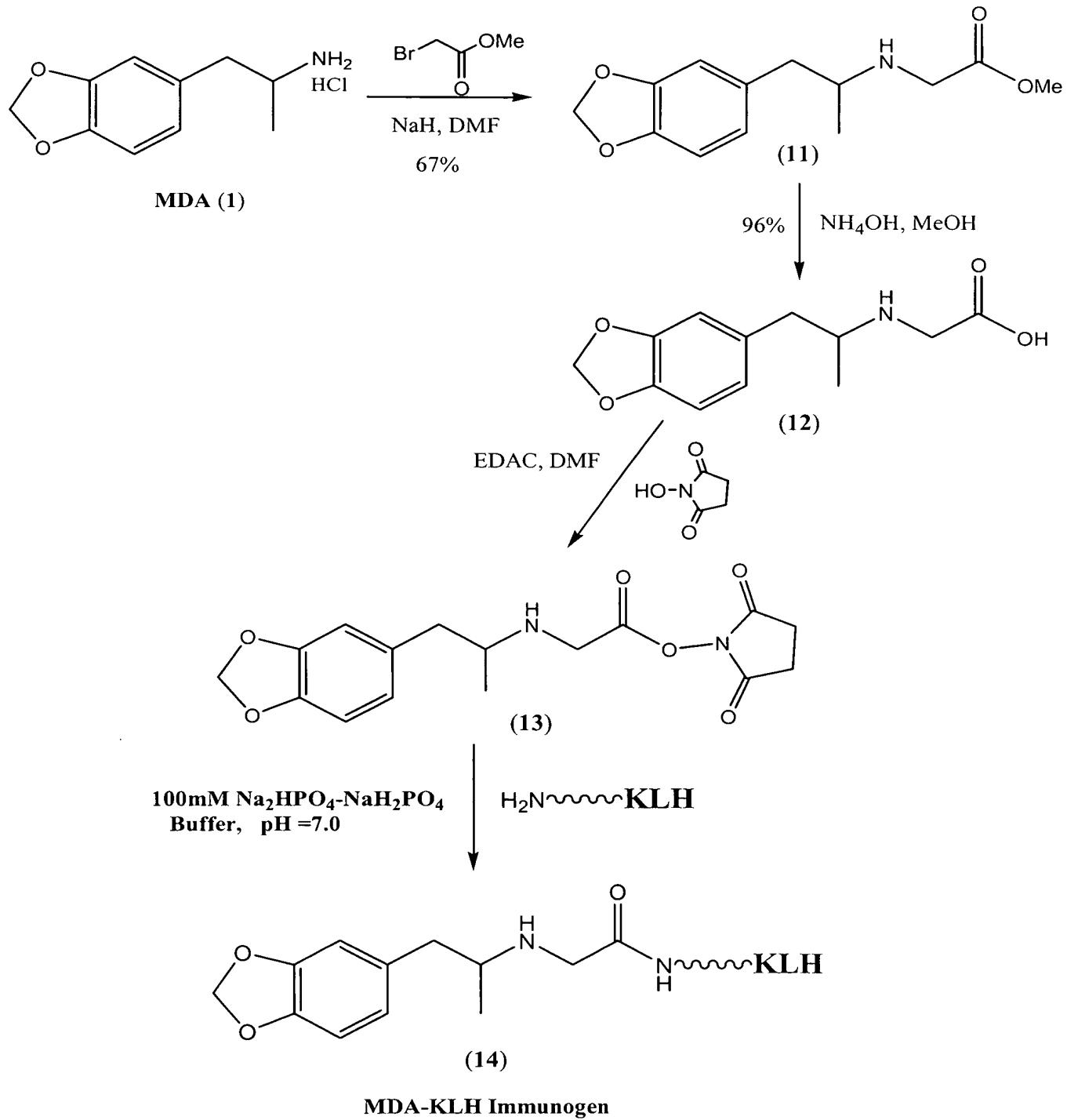


Figure 3. Synthesis of MDMA Haptens (15)-(17)

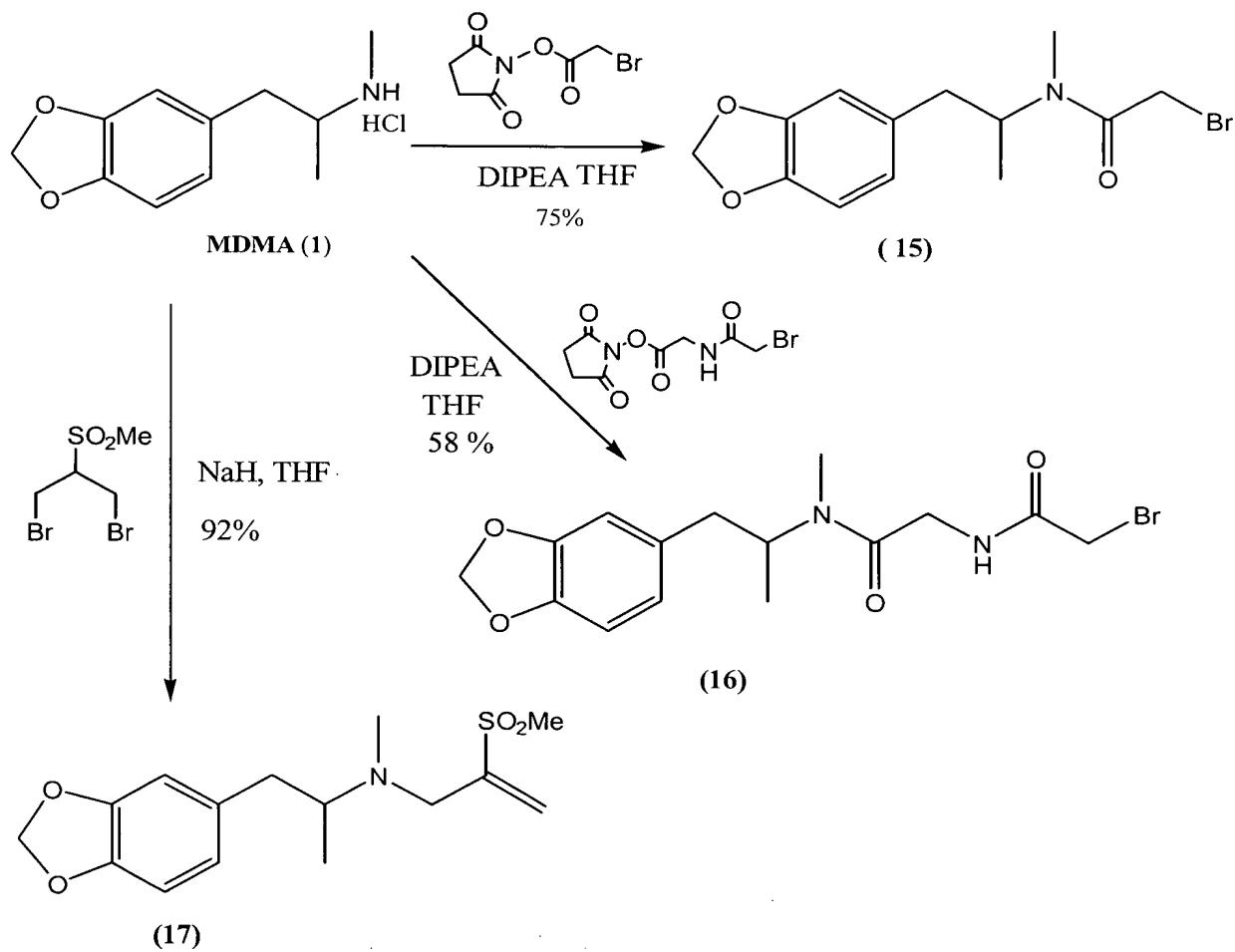


Figure 4A. Synthesis of MDA Haptens (18)-(19)

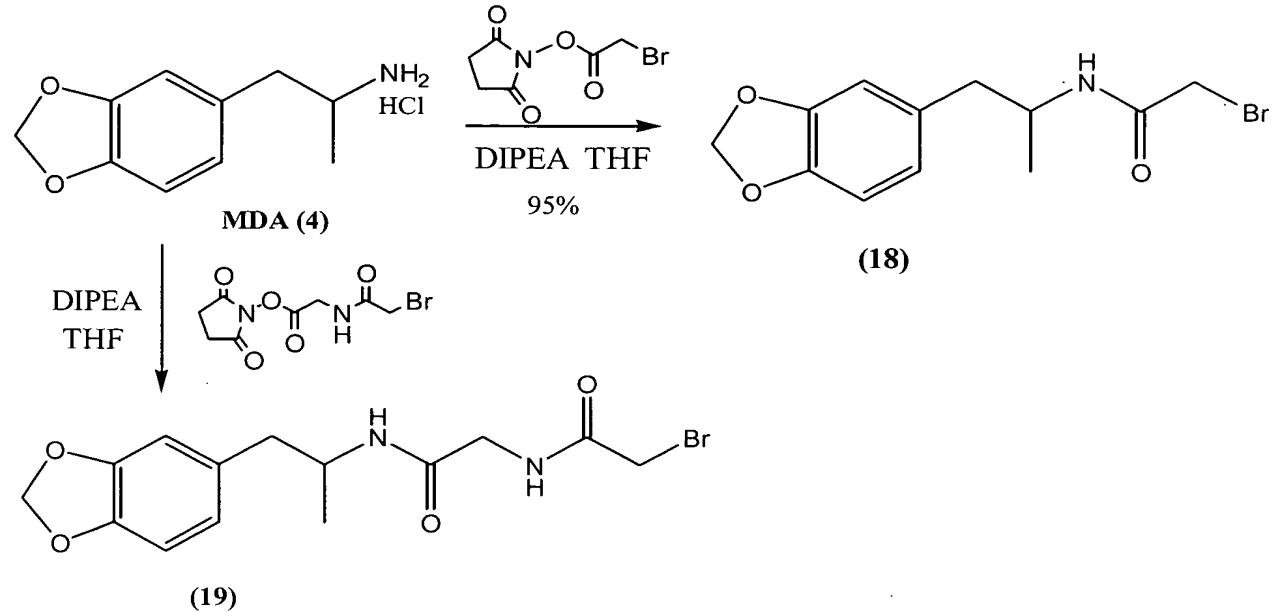


Figure 4B. Synthesis of MDA Hapten (20)

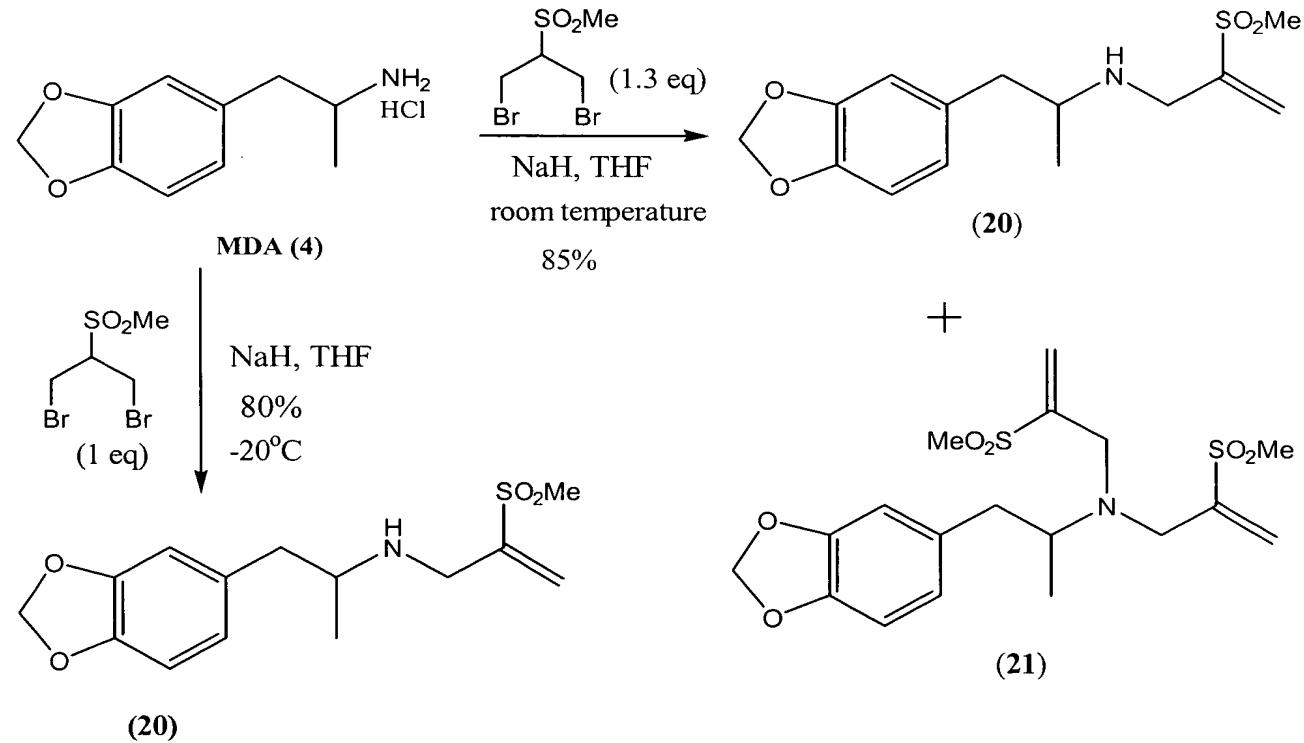


Figure 5. Synthesis of HMMA Intermediate (29) for Immunogen (30)

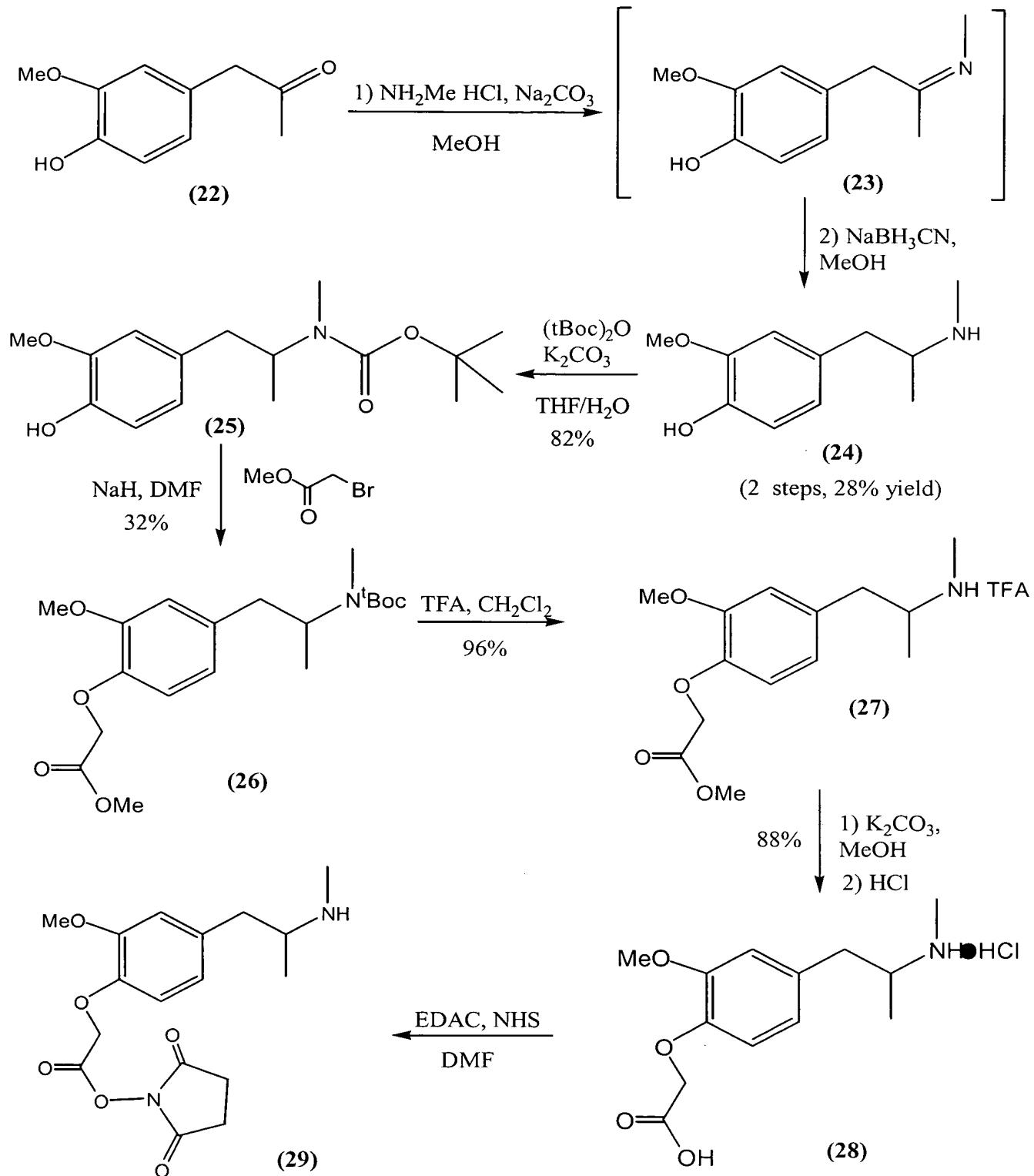


Figure 6. Synthesis of HMMA-KLH Immunogen (30)

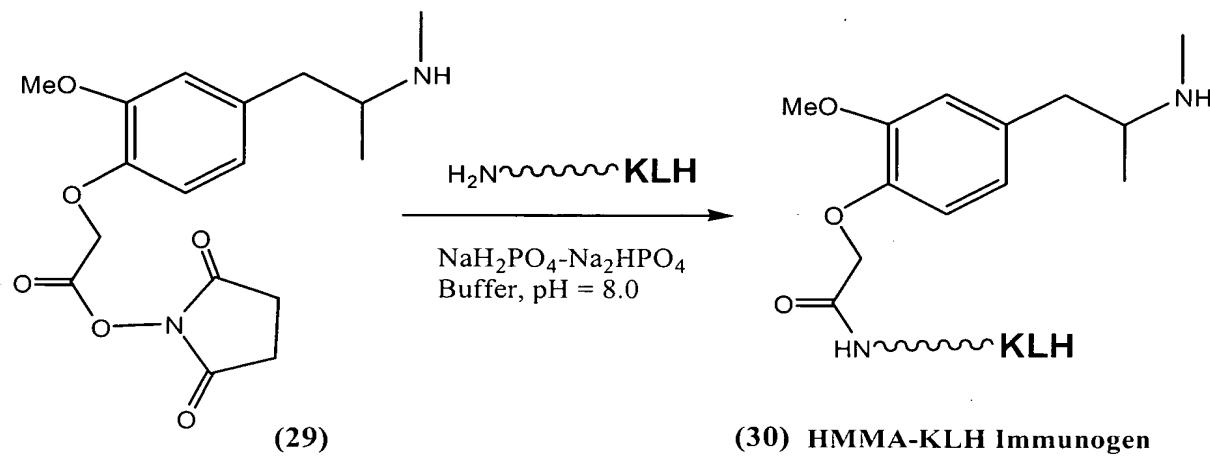


Figure 7. Synthesis of HMMA-KLH Immunogen (36)

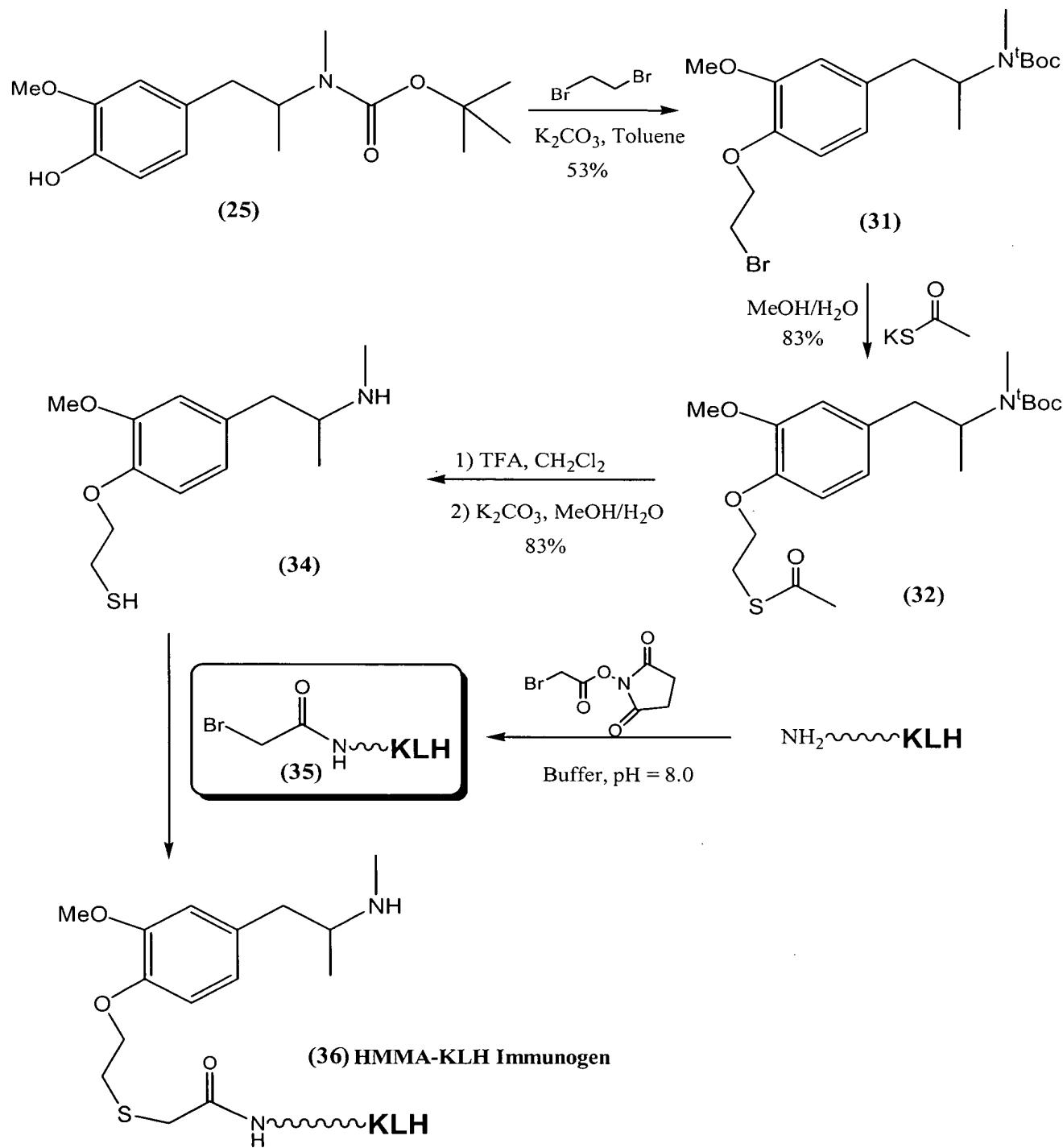


Figure 8A. Synthesis of MDMA Hapten (38)

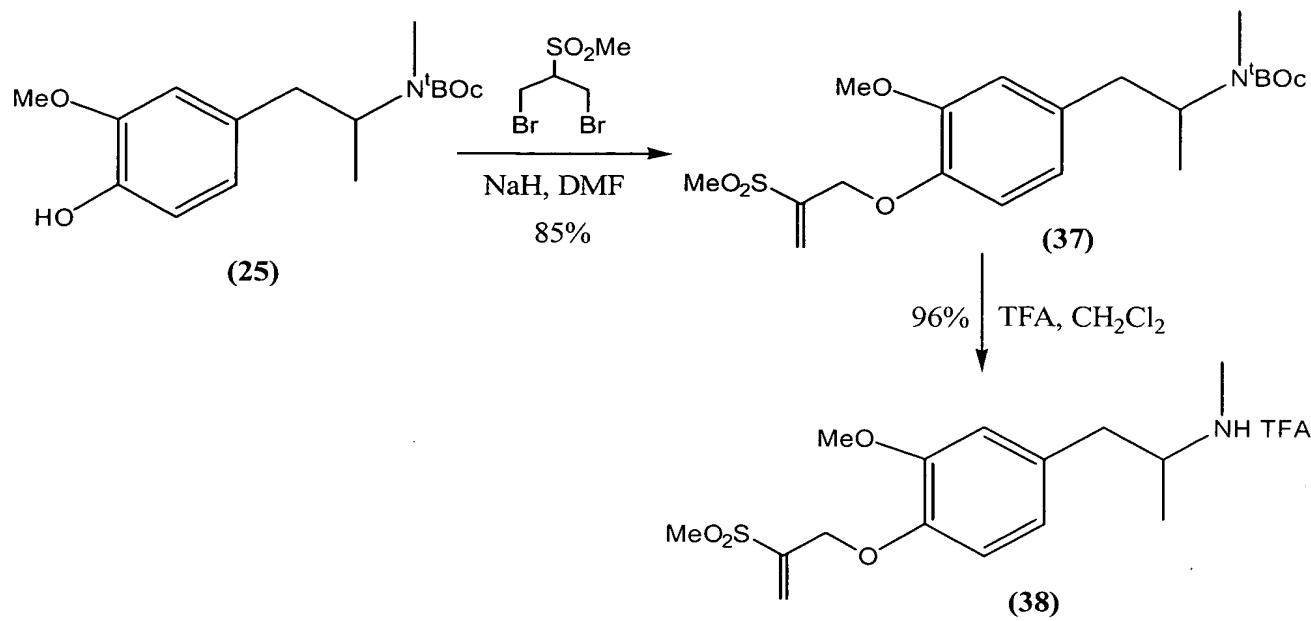


Figure 8B. Synthesis of MDMA Hapten Intermediate (40)

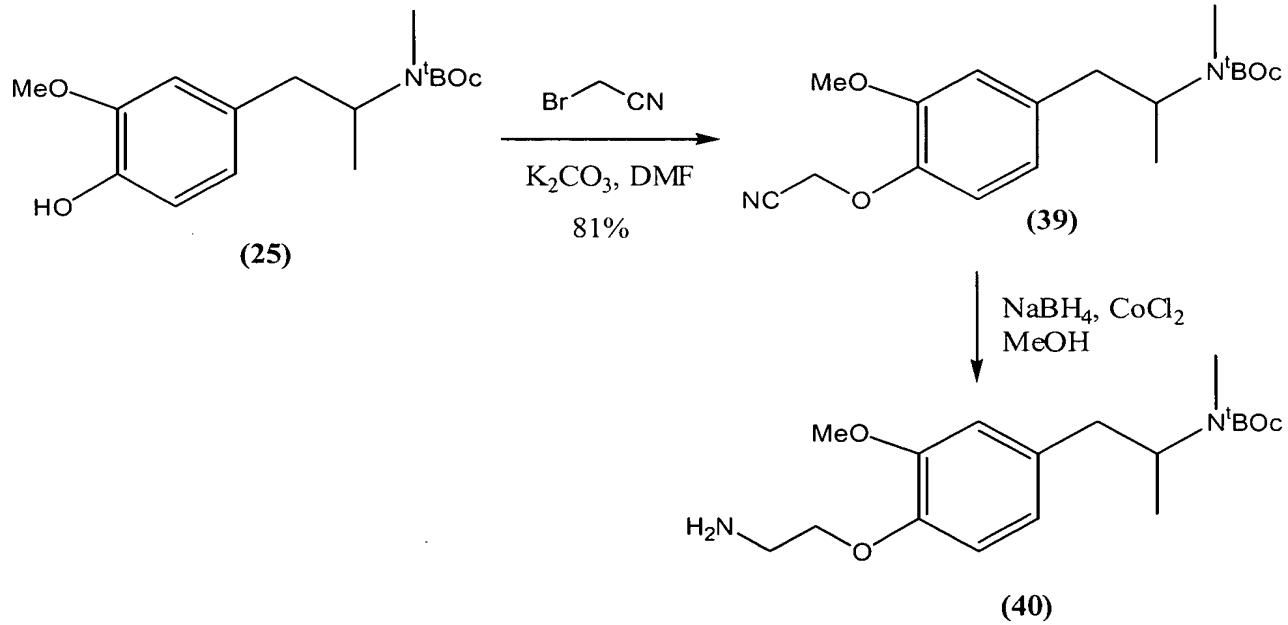
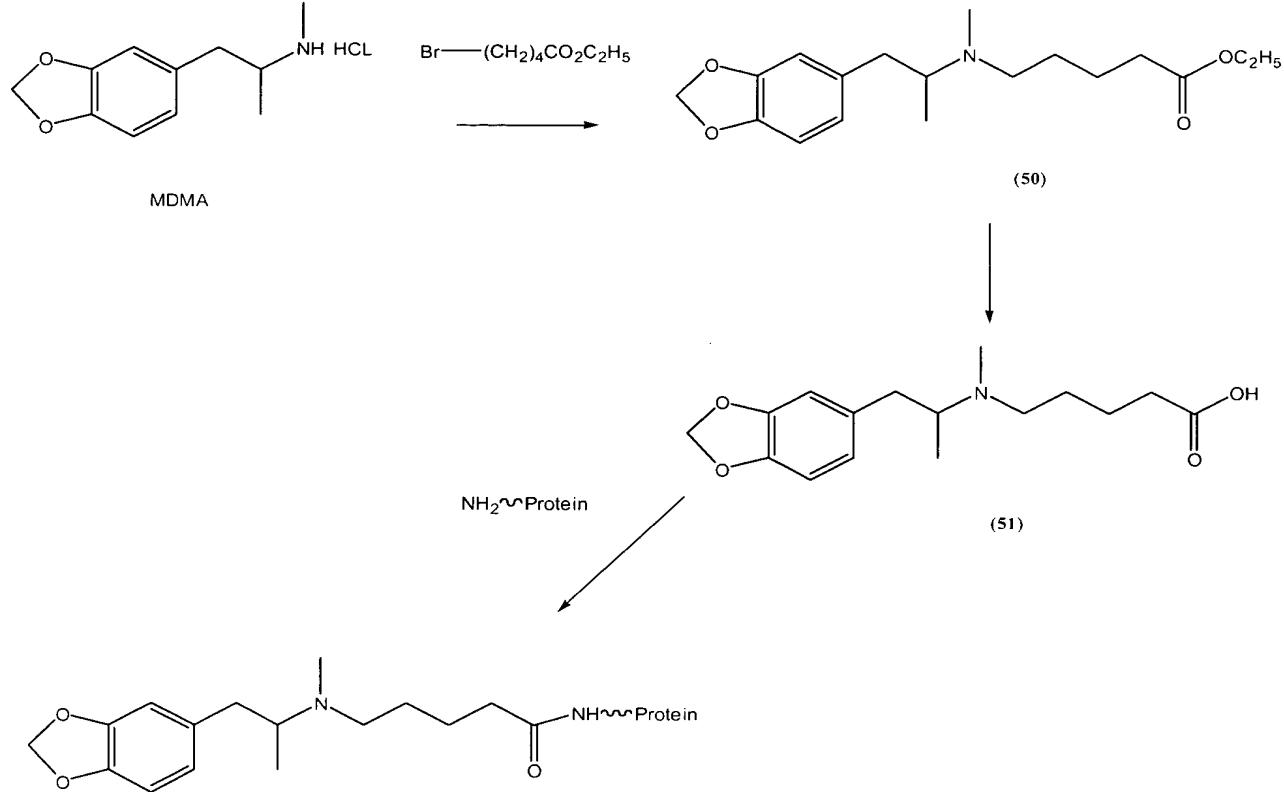


FIG. 9



KLH = 52
BSA = 53

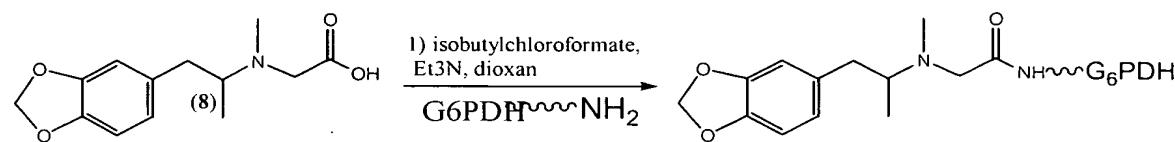


FIG. 10

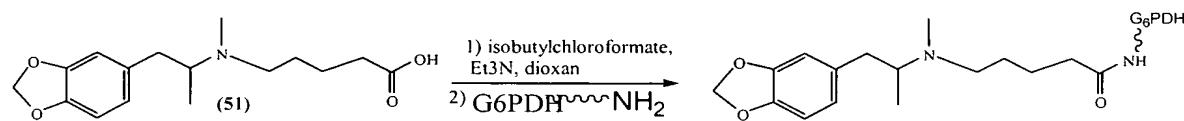


FIG. 11